

```
=> d his
(FILE 'HOME' ENTERED AT 15:38:19 ON 13 DEC 95)
FILE 'USPAT' ENTERED AT 15:38:32 ON 13 DEC 95
L1      3044 S MULTIPROCESS?
L2      360 S (SYMMETRICAL MULTIPROCESS? OR SMP)
L3      6 S SEQUENT COMPUTER
L4      0 S L2 AND L3
L5      0 S L3 AND (CUSTOMER (W) SERVICE (W) INFORMATION)
L6      0 S L3 AND (CUSTOMER (W) ACCOUNT)
L7      0 S L3 AND (CUSTOMER (W) ACCOUNT#)
L8      96 S L2 AND SEGMENT#
L9      337 S CUSTOMER (W) ACCOUNT#
L10     0 S L8 AND L9
L11     0 S L8 AND L3
L12     2 S DYNIX
L13 (   6) S L2 AND BATCH PROCESSING
L14     2333 S BATCH (W) PROCESSING
L15     6 S L2 AND L14
L16     432 S CELLULAR PHONE#
L17     265 S BILLING SYSTEM#
L18     7 S L16 AND L17
```

=> d date ab 1-

L18: 1 of 7

TITLE: Selective screening of incoming calls for cellular
telephone systems

US PAT NO: 5,473,671 DATE ISSUED: Dec. 5, 1995
[IMAGE AVAILABLE]

APPL-NO: 08/212,547 DATE FILED: Mar. 11, 1994

ABSTRACT:

In connection with cellular telephones, the divergent call treatment technique of the present invention is used to particular advantage. A list of accepted callers is maintained by a service supplier. When a call comes in, a determination is made as to whether the caller is an "accepted" caller. If so, the call is forwarded to the cellular telephone. Otherwise, the caller is offered the option to pay for the call. A willingness on the part of the caller to pay for the call is indicated by a signal from the caller, such as pressing a key on a DTMF pad. In response to such a signal, the call is forwarded to the cellular telephone. In the absence of such a signal, the call is disconnected or diverted.

L18: 2 of 7

TITLE: Point-of-sale system for programming a cellular telephone
with its assigned telephone number

US PAT NO: 5,465,288 DATE ISSUED: Nov. 7, 1995
[IMAGE AVAILABLE]

APPL-NO: 08/070,087 DATE FILED: Jun. 1, 1993

ABSTRACT:

A point-of-sale programming system for a selected one of a plurality of types and models of cellular telephone. A point-of-sale computer has an I/O port generating command and data information corresponding to the specific set of command signals and data signals required for the selected telephone to be programmed and for reading the preassigned serial number of the telephone. An interface converts the information into the specific set of command and data signals required for the

selected telephone to be programmed. The interface has a telephone interface port through which the specific set of command signals and data signals are provided. The interface reads the preassigned serial number via the telephone interface port. An RS232 cable connects the I/O port of the computer and the interface. A passive cable with an RJ45 connector connects the telephone interface port of the interface and the programming port of the selected cellular telephone. The point-of-sale computer provides the system computer via modem with the preassigned serial number of the selected cellular telephone being programmed thereby permitting the system computer to verify that the selected telephone can access the CT system.

L18: 3 of 7

TITLE: Apparatus for prepayment of telecommunication connections
in a telecommunication switching network without
utilization of rate schedules and call cost computations

US PAT NO: 5,440,621 DATE ISSUED: Aug. 8, 1995
[IMAGE AVAILABLE] DISCL-DATE: Nov. 23, 2010

APPL-NO: 08/155,732 DATE FILED: Nov. 22, 1993

REL-US-DATA: Continuation of Ser. No. 738,577, Jul. 31, 1991, Pat. No.
5,265,155, Nov. 23, 1993.

ABSTRACT:

The present invention provides a method and apparatus for prepayment of telecommunication connections between first and second telecommunication devices operably associatable with the telecommunication lines of a telecommunication switching network. In general, the method involves storing telecommunication-time data representative of a prepurchased amount of telecommunication-time available for payment of telecommunication connections in the telecommunication switching network. At the initiation of the first telecommunication device, a telecommunication connection is established between the first and second telecommunication devices so that a telecommunication process can be conducted therebetween. The telecommunication connection between the first and second telecommunication devices is terminated in response to termination of the telecommunication process. The time duration of the telecommunication connection is measured. The stored telecommunication-time data is processed to indicate a decrement in the available telecommunication-time, which is essentially equal to the measured time duration of the telecommunication connection. Various embodiments of telecommunication-time metering apparatus are provided for carrying out the method of the present invention.

L18: 4 of 7

TITLE: Cellular telephone calling system using credit card
validation

US PAT NO: 5,388,148 DATE ISSUED: Feb. 7, 1995
[IMAGE AVAILABLE]

APPL-NO: 08/030,675 DATE FILED: Mar. 11, 1993

REL-US-DATA: Continuation-in-part of Ser. No. 743,972, Aug. 12, 1991.

ABSTRACT:

The cellular telephone credit card calling system works in conjunction with a cellular telephone, a local cellular network and an IXC in a telecommunications network. The cellular telephone has a handset and a transceiver unit coupled together by a power and a communications bus. A credit card interface unit is coupled to the bus. The interface unit has a credit card reader and an electronic system which initially validates

the credit card. The cellular telephone also includes electronic circuitry which establishes a first telephone communications link with the network and transmits, via the transceiver unit for the phone, to the network, credit card data, a cellular telephone ID data and the telephone number input into the handset by the user. Upon receipt of at least the credit card data, a network transceiver verifies the validity of the user's credit card. After the credit card has been validated by the IXC through a verification or validation computer service, the network transceiver then completes a further telephonic communications link between the cellular telephone, operated by the user, and the telephonic device associated with the input telephone number, that is, the third party's telephone. Since the network transceiver does not complete the call to the third party prior to validation of the user's credit card, the system operates in real time. Further, in a preferred embodiment, the network transceiver provides some type of indication to the credit interface unit that the credit card has been validated. Thereafter, the user is permitted to make additional cellular telephone calls without requiring further validation of the credit card data by the network transceiver.

L18: 5 of 7

TITLE: Method and apparatus for prepayment of telecommunication connections by registered groups of subscribers in a telecommunication switching network

US PAT NO: 5,359,642 DATE ISSUED: Oct. 25, 1994
[IMAGE AVAILABLE]

APPL-NO: 08/023,335 DATE FILED: Feb. 26, 1993

REL-US-DATA: Continuation of Ser. No. 785,272, Oct. 30, 1991,
abandoned.

ABSTRACT:

The present invention provides a method and apparatus for prepayment of telecommunication connections between first and second telecommunication devices operably associable with the telecommunication lines of a telecommunication switching network. In general, the method involves storing monetary value data representative of a prepaid e.g. deposited in a centralized storage device, amount of monetary value available for payment of telecommunication connections in the telecommunication switching network. At the initiation of the first telecommunication device, a telecommunication connection is established between the first and second telecommunication devices so that a telecommunication process can be conducted therebetween. The telecommunication connection between the first and second telecommunication devices is terminated in response to termination of the telecommunication process. The time duration of the telecommunication connection is measured. The cost of the telecommunication connection is computed using the measured time duration and applicable prepaid rate data. The stored monetary value data is processed to indicate a decrement in the available prepaid monetary value, which decrement is essentially equal to the computed cost of the telecommunication connection. Telecommunication cost computing apparatus are provided for carrying out the method of the present invention using various telecommunication devices including privately sponsored prepay-type and **cellular** **phones**. Advantageously, the present invention allows groups of registered subscribers to prepay a bulk amount of monetary funds for telecommunication connections initiated by the members of the registered group, and thereby acquire preferred calling rates.

TITLE: Dynamic pricing method and apparatus for communication systems
US PAT NO: 5,303,297 [IMAGE AVAILABLE] DATE ISSUED: Apr. 12, 1994
APPL-NO: 07/735,733 DATE FILED: Jul. 25, 1991

ABSTRACT:

A communication system service billing arrangement is described that adapts to system loading in realtime. As system loading varies, one or more individual subscribers units (ISU) of a communication system are provided with realtime information on the current cost of the communication service. The system determines the locations of the ISUs and the current loading there between and calculates a calling rate based at least on the current loading. This calling rate is sent to at least one of the ISUs whose operator can choose to connect or not connect the call between the ISUs based on the current realtime variable rate.

TITLE: Method and apparatus for prepayment of telecommunication connections in a telecommunication switching network
US PAT NO: 5,265,155 [IMAGE AVAILABLE] DATE ISSUED: Nov. 23, 1993
APPL-NO: 07/738,577 DATE FILED: Jul. 31, 1991

ABSTRACT:

The present invention provides a method and apparatus for prepayment of telecommunication connections between first and second telecommunication devices operably associatable with the telecommunication lines of a telecommunication switching network. In general, the method involves storing telecommunication-time data representative of a prepurchased amount of telecommunication-time available for payment of telecommunication connections in the telecommunication switching network. At the initiation of the first telecommunication device, a telecommunication connection is established between the first and second telecommunication devices so that a telecommunication process can be conducted therebetween. The telecommunication connection between the first and second telecommunication devices is terminated in response to termination of the telecommunication process. The time duration of the telecommunication connection is measured. The stored telecommunication-time data is processed to indicate a decrement in the available telecommunication-time, which is essentially equal to the measured time duration of the telecommunication connection. Various embodiments of telecommunication-time metering apparatus are provided for carrying out the method of the present invention.

=> d l3 kwic 1-

US PAT NO: 5,367,647 [IMAGE AVAILABLE]

L3: 1 of 6

SUMMARY:

BSUM(4)

There . . . known as the MAS bus for controlling mass storage devices used with its VAX series of computers. In like manner, **Sequent** **Computer** Systems, Beaverton, Oreg., has used storage module device disk drives (SMD) and controllers in its Balance 8000 and S-Series computers.. . .

SUMMARY:

BSUM(7)

The . . . costs. The performance/cost ratio of SCSI bus-based mass storage systems has improved so much that large system manufacturers, such as **Sequent** **Computer** Systems, now prefer to use SCSI bus-based mass storage systems with its computers.

US PAT NO: 5,361,352 [IMAGE AVAILABLE]

L3: 2 of 6

SUMMARY:

BSUM(7)

Although . . . in order to eliminate these bugs from the programs. One product named as "Pdbx Parallel Debugger" is commercially available from **SEQUENT** **COMPUTER** SYSTEMS INC. The debugging method of this debugger is described in a leaflet "Pdbx Parallel Debugger for Balance Computer Systems". . .

US PAT NO: 5,325,525 [IMAGE AVAILABLE]

L3: 3 of 6

SUMMARY:

BSUM(7)

In . . . communication delays and synchronization can be accomplished using high-performance, low-level techniques. Shared-memory multiprocessor architectures have been described in, for example, **Sequent** **Computer** et al., "Combining the Benefits of Relational Database Technology and Parallel Computing", Technical Seminar, San Francisco, Sep. 28, 1988. Computers. . .

DETDESC:

DETD(17)

The . . . 103. Computers of this general kind are known in the art; see, for example, Osterhaug, Guide to Parallel Programming on **Sequent** **Computer** Systems, 1989.

US PAT NO: 5,179,702 [IMAGE AVAILABLE]

L3: 4 of 6

SUMMARY:

BSUM(27)

The Dynix operating system for the Sequent Balance 21000 available from **Sequent** **Computer** Systems, Inc. is a multithreaded operating system that uses bus access to common memory, rather than arbitration access. Similarly, the. . .

US PAT NO: 4,985,826 [IMAGE AVAILABLE]

L3: 5 of 6

SUMMARY:

BSUM(6)

When . . . is used e.g. according to the journal "Computer Design", Aug. 15, 1985, pp 76-81" or "Balance 8000 System Technical Summary, **Sequent** **Computer** Systems, Inc" programming languages, compilers and sequence hardware for parallel processing of mutually independent sequences while parallel processing of the. . .

US PAT NO: 4,956,770 [IMAGE AVAILABLE]

L3: 6 of 6

SUMMARY:

BSUM(6)

When . . . prescribed order, e.g., according to the journal Computer Design, Aug. 15, 1985, pp 76-81, or "Balance 8000 System Technical Summary, **Sequent** **Computer** Systems, Inc", programming languages, compilers and sequence hardware for parallel processing of mutually independent sequences, are used while parallel processing. . .